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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,403	09/18/2000	Ross H. Cornell	05997.0019-00	4008
22852	7590	01/22/2004	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005			AKERS, GEOFFREY R	
			ART UNIT	PAPER NUMBER
			3624	

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/664403

Applicant(s)

Cornell

Examiner

Aker, g

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/4/03
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10, 27-70 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10, 27-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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DETAILED ACTION

Response to Request for Continued Examination(RCE)

1. This action is issued in reply to applicant's Request for Continued Examination(RCE)(Paper #12) and Amendment B(Paper #13) filed 12/4/03.
2. Claims 7,27,28,31,45,49,51-53,56-58,60-62 were amended.
3. Claims 7-10 and 27-70 are pending.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-10,27-70 are rejected under 35 USC 103(a) as unpatentable over Pemberton(Canso Investment Counsel) in view of Layer Eight Systems(1994) and further in view of "An Investor's Guide to Mortgage Securities"(IGMS)(1997).
6. As per newly amended claims 7-10,27-70 Pemberton teaches a method for the creation of structured interest rate securities(page 1).Pemberton also teaches that structured notes contain embedded options which may be plain or exotic(page 1).Pemberton further teaches that plain structures include callable, puttable and extendable bonds which will mitigate prepayment risk(Page 1).In addition to that taught by Pemberton, Layer Eight teaches a real time interest rate

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derivatives pricing system as well as hedging strategies and floating rate characteristics(page 4) including constant maturity structures and interest rate guarantees(page 4) as well as a data processing software(document).Layer Eight further teaches yield curve modules and modular calculators(page 2) as well as real time data feeds(page 2).Level Eight also teaches caps and floors collars,corridors,straddles and swap options(page 3) as well as multiple price swap matrices(page 4). IGMS teaches delineating the risks associated with each of the classes of mortgage securities(pages 1-2).IGMS further teaches planned amortization class (PAC) bonds and targeted amortization class bonds(TAC) which have been designed to reduce investors' prepayment risk by establishing a sinking fund structure(page 8).IGMS also teaches IO and PO securities(page 10), whereby IO's rise and fall in value according to interest rate fluctuations(page 10). IOs can also be hedged. It would have been obvious to one skilled in the art at the time of the invention to combine Pemberton in view of Layer Eight Systems to teach part of the disclosure. The motivation to combine is to teach a method for utilizing structured notes in combination with interest rate derivatives as delineated with Layer Eight.It also would have been obvious to one skilled in the art at the time of the invention to combine Pemberton in view of Layer Eight and further in veiw of IGMS to teach applicant's disclosure. The motivation to combine is to teach a method for restructuring structured notes by utilizing sinking fund provisions or a combination of interest rate derivatives to hedge against prepayment risk as delineated by IGMS(page 8).

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Response to Arguments

7. Applicant's arguments with respect to claims 7-10 and 27-70 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. **THIS ACTION IS MADE NON-FINAL.**

9. Any questions concerning this communication should be addressed to the examiner of record, Dr. Geoffrey Akers, P.E., who can be reached between 6:30 AM and 5:00 PM Monday through Friday at 703-306-5844. If attempts to contact the examiner are unsuccessful, the examiner's superior, Mr. Vincent Millin, SPE, may be telephoned at (703)-308-1065.

The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center 3600 or this Art Unit is (703)-308-3687.

GRA

January 15, 2004

DR. GEOFFREY R. AKERS, P.E.
PRIMARY EXAMINER